

FILE 'HOME' ENTERED AT 17:36:12 ON 21 DEC 2001

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.15

0.15

FILE 'REGISTRY' ENTERED AT 17:36:25 ON 21 DEC 2001

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 20 DEC 2001 HIGHEST RN 377724-19-1

DICTIONARY FILE UPDATES: 20 DEC 2001 HIGHEST RN 377724-19-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s dihydrofolic acid

11 DIHYDROFOLIC

5212123 ACID

7693 ACIDS

5217731 ACID

(ACID OR ACIDS)

L1 11 DIHYDROFOLIC ACID

(DIHYDROFOLIC(W)ACID)

=> d l1 1-11

L1 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2001 ACS

RN 87404-63-5 REGISTRY

CN Poly[imino(1-carboxy-4-oxo-1,4-butanediyl)],

.alpha.-[4-[[[(2-amino-1,4,7,8-  
tetrahydro-4-oxo-6-pteridiny]methyl]amino]benzoyl]-.omega.-hydroxy-,  
(S)-

(9CI) (CA INDEX NAME)

OTHER NAMES:

CN Dihydrofolic acid polyglutamate

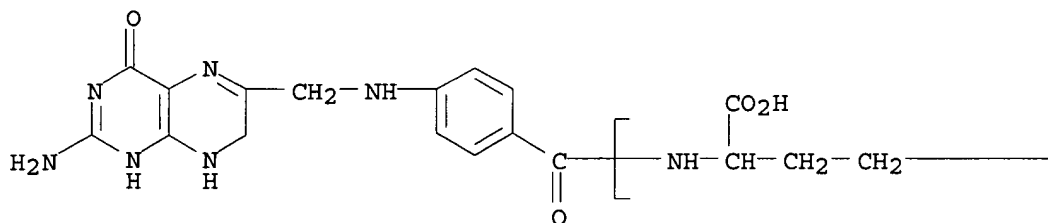
MF (C5 H7 N O3)n C14 H14 N6 O3

CI PMS

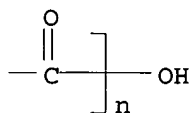
PCT Polyamine

LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT

PAGE 1-A



PAGE 1-B



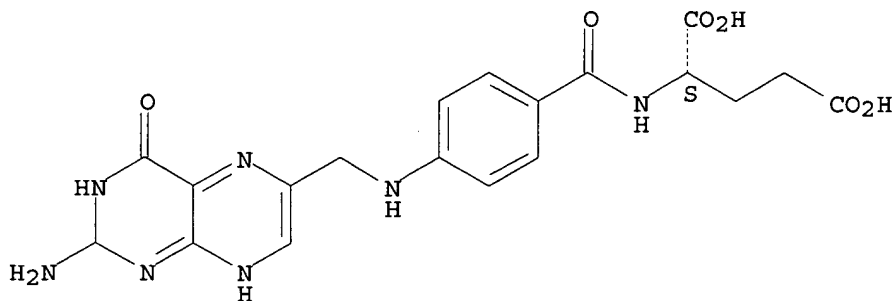
4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 83961-83-5 REGISTRY  
CN L-Glutamic acid, N-[4-[[[(2-amino-1,2,3,4-tetrahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **1,2-Dihydrofolic acid**  
FS STEREOSEARCH  
MF C19 H21 N7 O6  
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 59904-24-4 REGISTRY

CN L-Glutamic acid, N-[4-[[[2-amino-1,4,5,8-tetrahydro-5-methyl-4-oxo-6-pteridiny]methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glutamic acid, N-[p-[[[2-aminodihydro-4-hydroxy-5-methyl-6-pteridiny]methyl]amino]benzoyl]- (7CI)

OTHER NAMES:

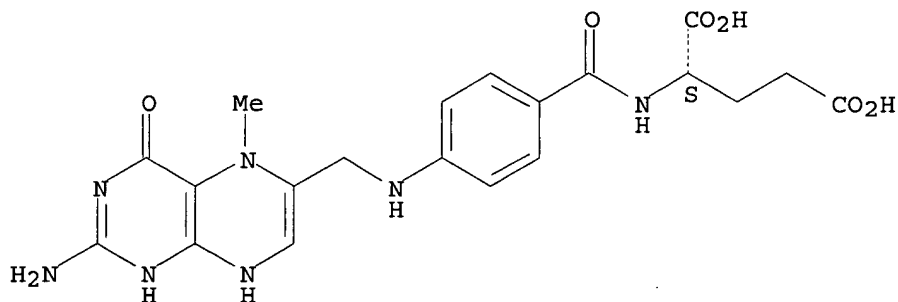
CN **5-Methyl-5,8-dihydrofolic acid**

FS STEREOSEARCH

MF C20 H23 N7 O6

LC STN Files: CA, CAOLD, CAPLUS, MEDLINE, TOXLIT

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1967 TO DATE)

4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2001 ACS

RN 59299-76-2 REGISTRY

CN L-Glutamic acid, N-[4-[[[2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny]methyl]amino]benzoyl]-, didehydro deriv. (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **N5-Methyldihydrofolic acid**

FS STEREOSEARCH

MF C20 H23 N7 O6

CI IDS

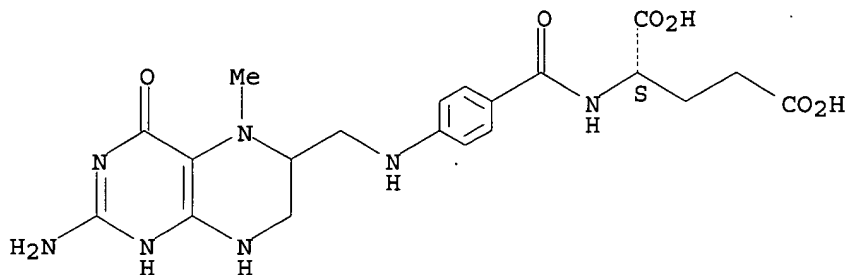
LC STN Files: CA, CAPLUS

CM 1

CRN 134-35-0

CMF C20 H25 N7 O6

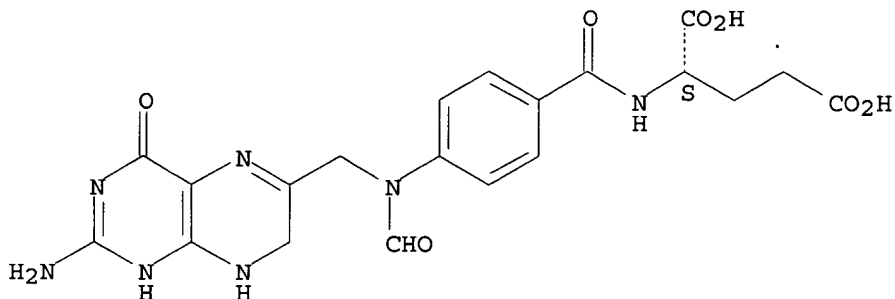
Absolute stereochemistry.



5 REFERENCES IN FILE CA (1967 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 28459-40-7 REGISTRY  
CN L-Glutamic acid, N-[4-[[[2-amino-1,4,7,8-tetrahydro-4-oxo-6-pteridiny]methyl]formylamino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-[N-[(2-amino-7,8-dihydro-4-hydroxy-6-pteridiny]methyl]formamido]benzoyl]- (8CI)  
OTHER NAMES:  
CN **N-Formyl-7,8-dihydrofolic acid**  
FS STEREOSEARCH  
MF C20 H21 N7 O7  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CANCERLIT, CAPLUS, MEDLINE, TOXCENTER, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 25377-55-3 REGISTRY  
CN L-Glutamic acid, N-[4-[[[2-amino-1,4,7,8-tetrahydro-4-oxo-6-pteridiny]methyl]formylamino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-[N-[(2-aminodihydro-4-hydroxy-6-pteridiny]methyl]formamido]benzoyl]-, L- (8CI)

OTHER NAMES:

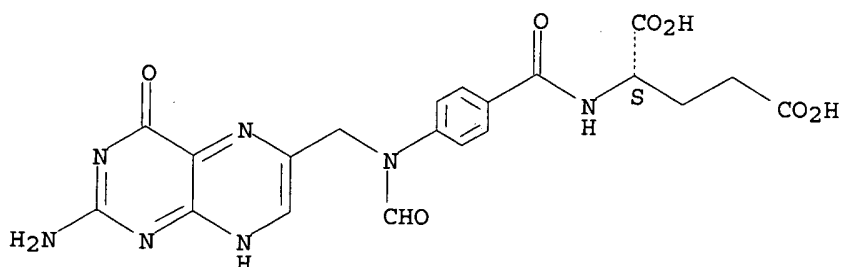
CN 10-Formyldihydrofolic acid  
 CN N10-Formyldihydrofolic acid  
 FS STEREOSEARCH  
 DR 35-76-7  
 MF C20 H21 N7 O7  
 CI IDS  
 LC STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, DDFU, DRUGU, NIOSHTIC,  
 TOXCENTER, TOXLIT

CM 1

CRN 134-05-4

CMF C20 H19 N7 O7

Absolute stereochemistry.



22 REFERENCES IN FILE CA (1967 TO DATE)

22 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2001 ACS

RN 17138-86-2 REGISTRY

CN Glutamic acid, N-[p-[[[2-amino-7,8-dihydro-4-hydroxy-7-methyl-6-pteridiny]methyl]amino]benzoyl]-, L- (8CI) (CA INDEX NAME)

OTHER NAMES:

CN 7-Methyl-7,8-dihydrofolic acid

CN C7-Methyldihydrofolic acid

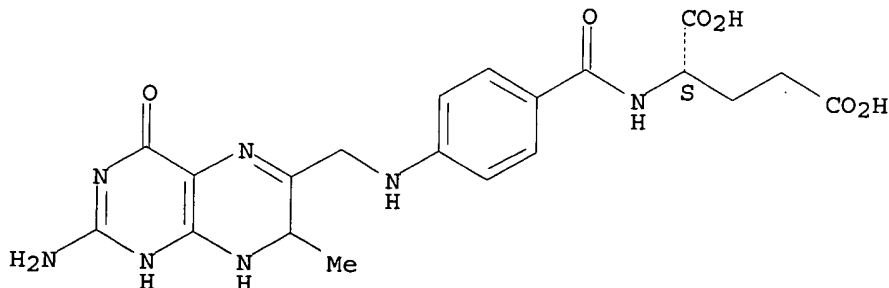
FS STEREOSEARCH

MF C20 H23 N7 O6

LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXLIT

(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

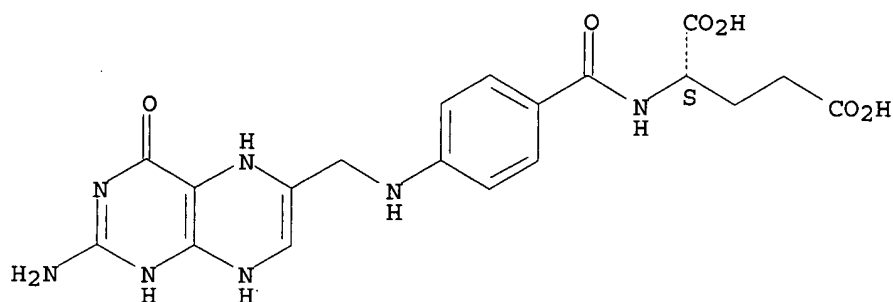
L1 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 9002-03-3 REGISTRY  
CN Dehydrogenase, tetrahydrofolate (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 7,8-Dihydrofolate reductase  
CN Dihydrofolate dehydrogenase  
CN Dihydrofolate reductase  
CN **Dihydrofolic acid reductase**  
CN Dihydrofolic reductase  
CN Dihydropteroylglutamate reductase  
CN E.C. 1.5.1.3  
CN E.C. 1.5.1.4  
CN Folate reductase  
CN Folic acid reductase  
CN Folic reductase  
CN NADP-dihydrofolate reductase  
CN NADPH-dihydrofolate reductase  
CN Reductase, dihydrofolate  
CN Tetrahydrofolate dehydrogenase  
DR 9001-17-6, 9038-35-1  
MF Unspecified  
CI MAN  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,  
CA, CABA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CIN, EMBASE,  
IFICDB, IFIPAT, IFIUDB, PROMT, TOXCENTER, TOXLIT, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

4287 REFERENCES IN FILE CA (1967 TO DATE)  
309 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
4291 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 4033-31-2 REGISTRY  
CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,8-tetrahydro-4-oxo-6-  
pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-[[[(2-amino-5,8-dihydro-4-hydroxy-6-  
pteridinyl)methyl]amino]benzoyl]- (7CI, 8CI)  
OTHER NAMES:  
CN **5,8-Dihydrofolic acid**  
FS STEREOSEARCH  
MF C19 H21 N7 O6  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXLIT  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

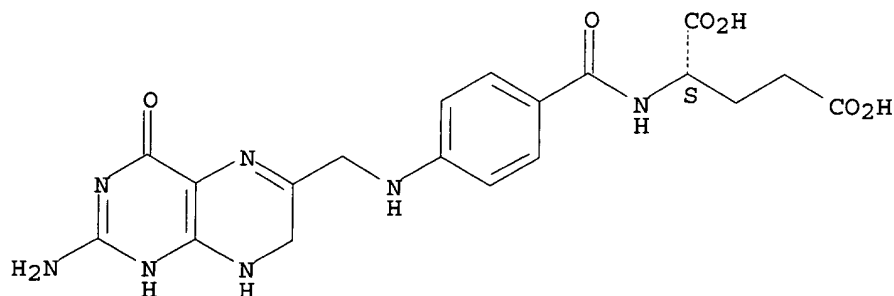


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2001 ACS  
 RN 4033-27-6 REGISTRY  
 CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,7,8-tetrahydro-4-oxo-6-pteridiny)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-[[[(2-amino-7,8-dihydro-4-hydroxy-6-pteridiny)methyl]amino]benzoyl]-, L- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 7,8-Dihydro-L-folic acid  
 CN **7,8-Dihydrofolic acid**  
 CN **Dihydrofolic acid**  
 FS STEREOSEARCH  
 MF C19 H21 N7 O6  
 CI COM  
 LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CHEMCATS, DDFU, DRUGU, MEDLINE, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



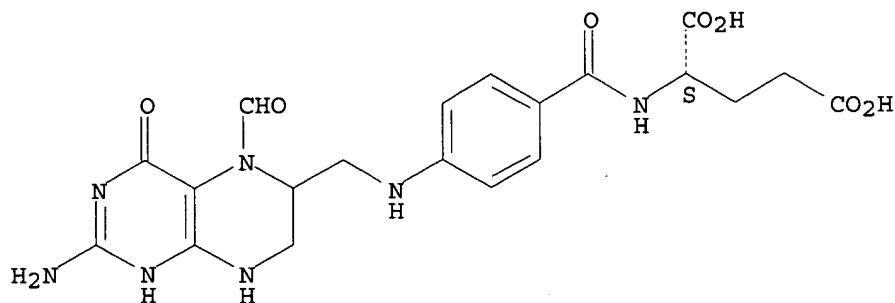
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

549 REFERENCES IN FILE CA (1967 TO DATE)

23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
549 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2001 ACS  
RN 58-05-9 REGISTRY  
CN L-Glutamic acid, N-[4-[[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridiny]methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-[[[(2-amino-5-formyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridiny]methyl]amino]benzoyl]-, L- (8CI)  
OTHER NAMES:  
CN **10-Formyl-7,8-dihydrofolic acid**  
CN 5-Formyl-5,6,7,8-tetrahydrofolic acid  
CN 5-Formyltetrahydrofolic acid  
CN 5-Formyltetrahydropteroylglutamic acid  
CN Folinic acid  
CN Folinic acid-SF  
CN l-Leucovorin  
CN Leucal  
CN Leucovorin  
CN Levoleucovorin  
CN N5-Formyl-5,6,7,8-tetrahydrofolic acid  
CN N5-Formyltetrahydrofolic acid  
CN Welcovorin  
FS STEREOSEARCH  
DR 641-41-8, 121521-95-7, 17435-36-8, 3102-53-2, 33299-78-4, 34786-59-9, 40244-99-3  
MF C20 H23 N7 O7  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HODOC\*, HSDB\*, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH, PROMT, TOXCENTER, TOXLIT, USAN, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

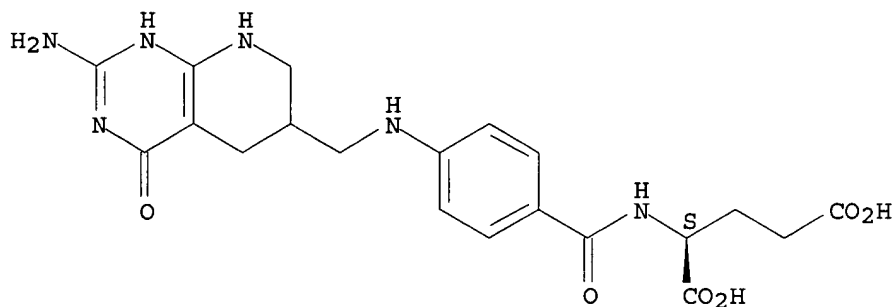
1629 REFERENCES IN FILE CA (1967 TO DATE)  
36 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
1634 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s tetrahydrofolic acid  
43 TETRAHYDROFOLIC  
5212123 ACID  
7693 ACIDS  
5217731 ACID  
(ACID OR ACIDS)  
L2 38 TETRAHYDROFOLIC ACID  
(TETRAHYDROFOLIC(W)ACID)

=> d l2 1-38

L2 ANSWER 1 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 115499-24-6 REGISTRY  
CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxopyrido[2,3-d]pyrimidin-6-yl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Pyrido[2,3-d]pyrimidine, L-glutamic acid deriv.  
OTHER NAMES:  
CN **5-Deazatetrahydrofolic acid**  
FS STEREOSEARCH  
MF C20 H24 N6 O6  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, TOXLIT, USPATFULL

Absolute stereochemistry.



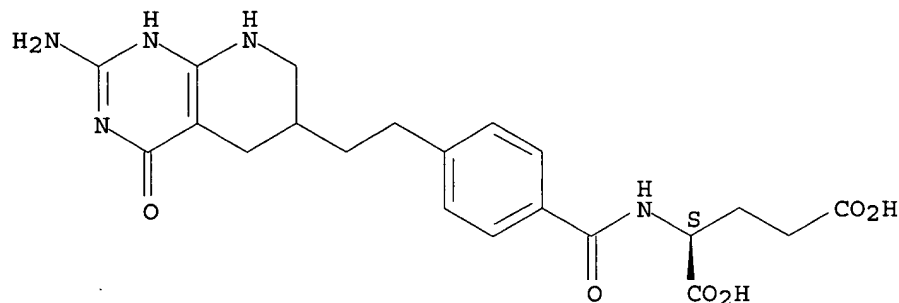
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
11 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 2 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 95693-76-8 REGISTRY  
CN L-Glutamic acid, N-[4-[2-(2-amino-1,4,5,6,7,8-hexahydro-4-oxopyrido[2,3-d]pyrimidin-6-yl)ethyl]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Pyrido[2,3-d]pyrimidine, L-glutamic acid deriv.  
OTHER NAMES:  
CN **5,10-Dideaza-5,6,7,8-tetrahydrofolic acid**

CN 5,10-Dideazatetrahydrofolic acid  
 CN DATHF  
 CN DDATHF  
 FS STEREOSEARCH  
 DR 116387-29-2  
 MF C21 H25 N5 O6  
 LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
 CANCERLIT, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, MEDLINE, PHAR, PROMT,  
 RTECS\*, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

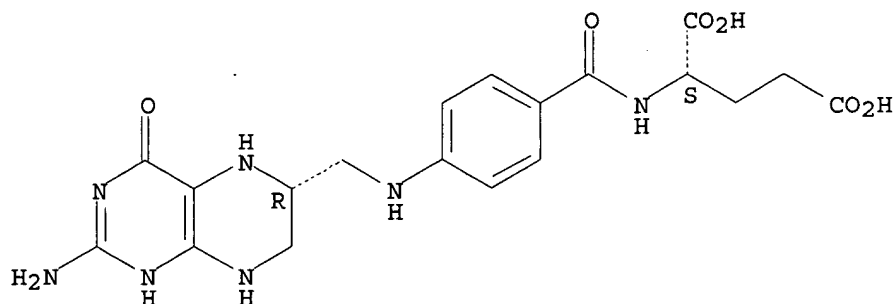


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

86 REFERENCES IN FILE CA (1967 TO DATE)  
 15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 86 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 3 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 74708-38-6 REGISTRY  
 CN L-Glutamic acid, N-[4-[[[(6R)-2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, (R)-  
 OTHER NAMES:  
 CN (6R)-Tetrahydrofolic acid  
 FS STEREOSEARCH  
 MF C19 H23 N7 O6  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

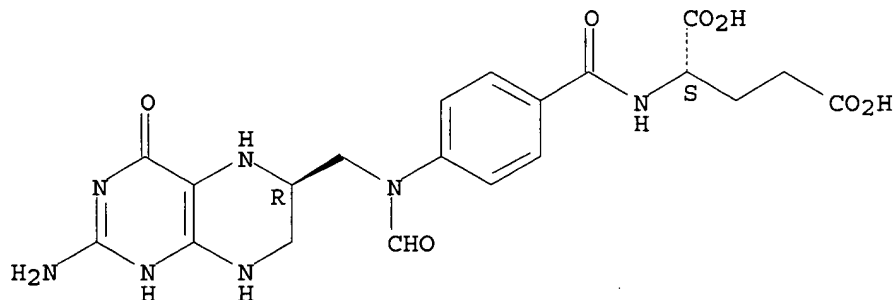


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

15 REFERENCES IN FILE CA (1967 TO DATE)  
15 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 4 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 74644-66-9 REGISTRY  
CN L-Glutamic acid, N-[4-[[[(6R)-2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridiny]methyl]formylamino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridiny]methyl]formylamino]benzoyl]-, (R)-  
OTHER NAMES:  
CN (6R)-10-Formyl-5,6,7,8-tetrahydrofolic acid  
CN (6R)-10-Formyltetrahydrofolic acid  
FS STEREOSEARCH  
MF C20 H23 N7 O7  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



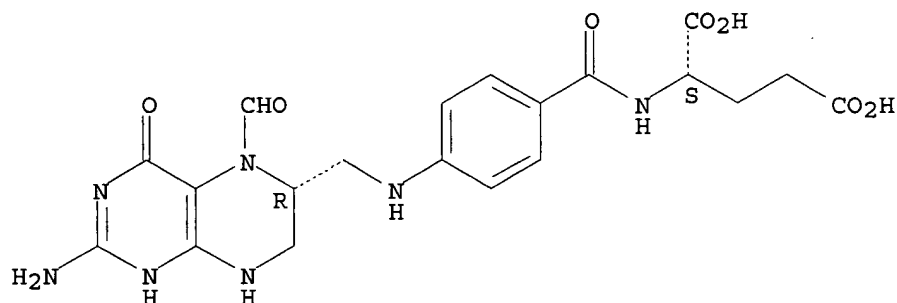
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

15 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
15 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 5 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 73951-54-9 REGISTRY  
CN L-Glutamic acid,  
N-[4-[[[(6R)-2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-

6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN L-Glutamic acid, N-[4-[[ (2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, (R)-  
 OTHER NAMES:  
 CN (6R)-5-Formyl-5,6,7,8-tetrahydrofolic acid  
 CN (6R)-Folinic acid  
 CN (6R)-Leucovorin  
 FS STEREOSEARCH  
 DR 137643-04-0  
 MF C20 H23 N7 O7  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

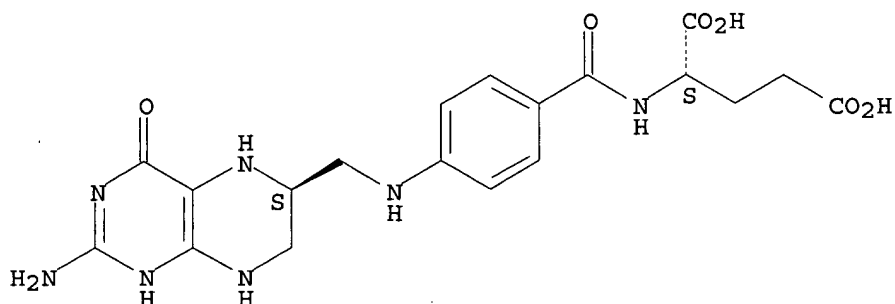


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

64 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 64 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 6 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 71963-69-4 REGISTRY  
 CN L-Glutamic acid, N-[4-[[[(6S)-2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN L-Glutamic acid, N-[4-[[ (2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, (S)-  
 OTHER NAMES:  
 CN (6S)-5,6,7,8-Tetrahydrofolic acid  
 CN (6S)-Tetrahydrofolic acid  
 FS STEREOSEARCH  
 MF C19 H23 N7 O6  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

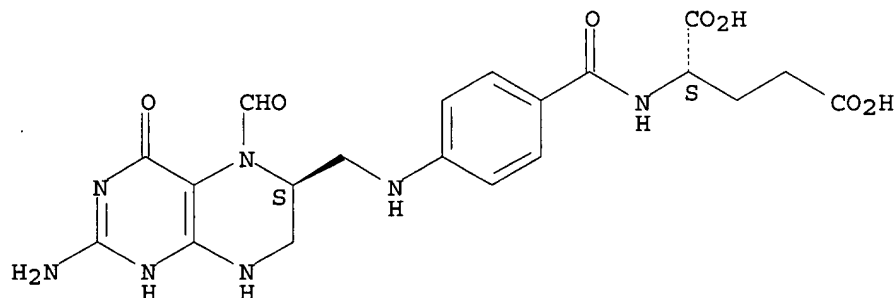


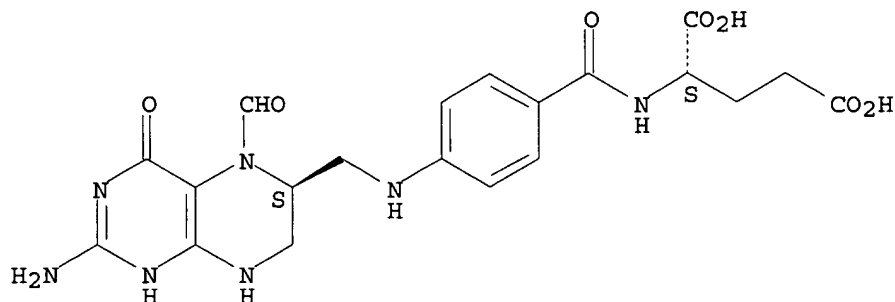
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

54 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 54 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 7 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 68538-85-2 REGISTRY  
 CN L-Glutamic acid,  
 N-[4-[[[(6S)-2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN L-Glutamic acid, N-[4-[[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, (S)-  
 OTHER NAMES:  
 CN (6S)-5-Formyl-5,6,7,8-tetrahydrofolic acid  
 CN (6S)-Folinic acid  
 CN (6S)-Leucovorin  
 CN (S)-Leucovorin  
 CN Citrovorum factor  
 CN L-Folinic acid  
 CN LFP 754  
 FS STEREOSEARCH  
 DR 121451-09-0  
 MF C20 H23 N7 O7  
 CI COM  
 LC STN Files: ADISNEWS, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, DDFU, DRUGPAT, DRUGU, EMBASE, MEDLINE, PROMT, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

135 REFERENCES IN FILE CA (1967 TO DATE)

5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

135 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 8 OF 38 REGISTRY COPYRIGHT 2001 ACS

RN 60672-18-6 REGISTRY

CN L-Glutamic acid, N-[4-[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, sodium salt (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Sodium tetrahydrofolic acid**

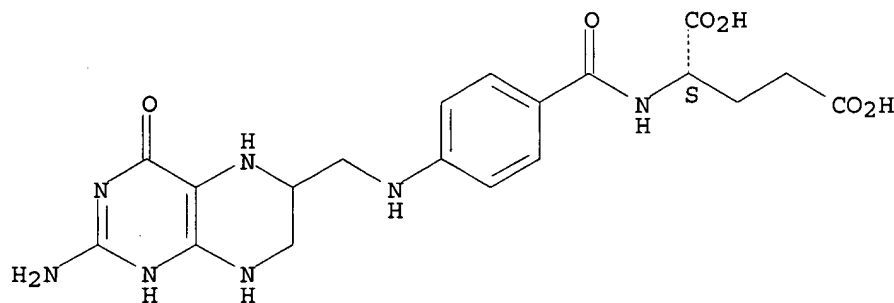
FS STEREOSEARCH

MF C19 H23 N7 O6 . x Na

LC STN Files: CA, CAPLUS

CRN (135-16-0)

Absolute stereochemistry.



●x Na

2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 9 OF 38 REGISTRY COPYRIGHT 2001 ACS

RN 55038-70-5 REGISTRY

CN L-Glutamic acid, N-[4-[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)

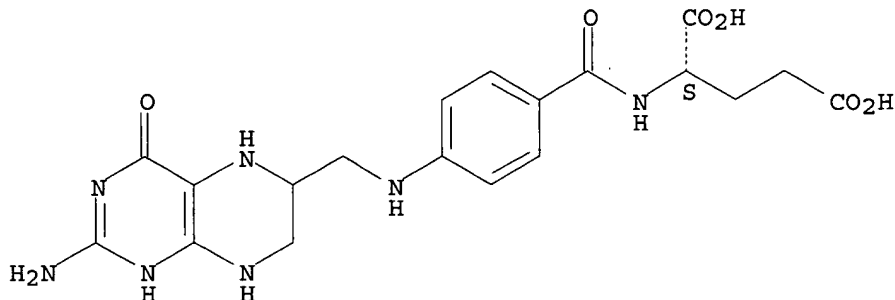
OTHER NAMES:

CN **Tetrahydrofolic acid dihydrochloride**

FS STEREOSEARCH

MF C19 H23 N7 O6 . 2 Cl H  
LC STN Files: CA, CAPLUS  
CRN (135-16-0)

Absolute stereochemistry.

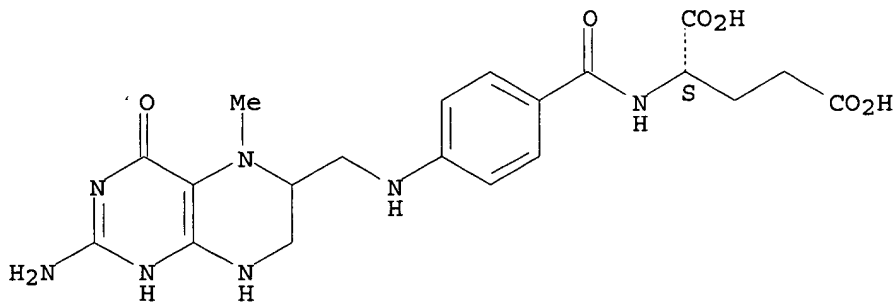


● 2 HCl

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 10 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 51759-13-8 REGISTRY  
CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny)]methyl]amino]benzoyl]-, sodium salt (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **5-Methyltetrahydrofolic acid sodium salt**  
CN Sodium N5-methyltetrahydrofolate  
FS STEREOSEARCH  
MF C20 H25 N7 O6 . x Na  
LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
CRN (134-35-0)

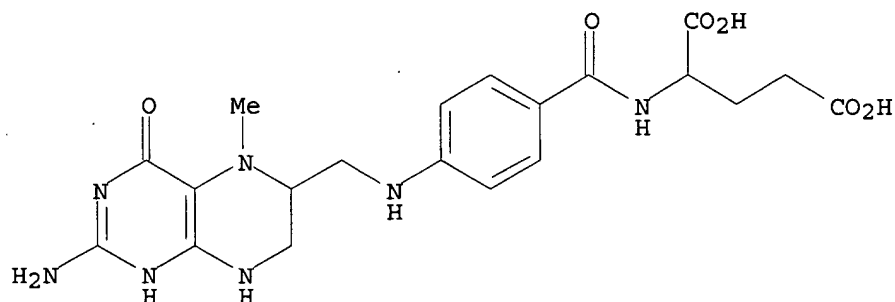
Absolute stereochemistry.



● x Na

4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 11 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 39605-23-7 REGISTRY  
 CN Glutamic acid, N-[4-[[[2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny]methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN DL-Glutamic acid, N-[4-[[[2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny]methyl]amino]benzoyl]-  
 OTHER NAMES:  
 CN **DL-5-Methyltetrahydrofolic acid**  
 CN **dl-5-Methyltetrahydrofolic acid**  
 CN DL-5-Methyltetrahydropteroylglutamic acid  
 CN **DL-N5-Methyltetrahydrofolic acid**  
 MF C20 H25 N7 O6  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

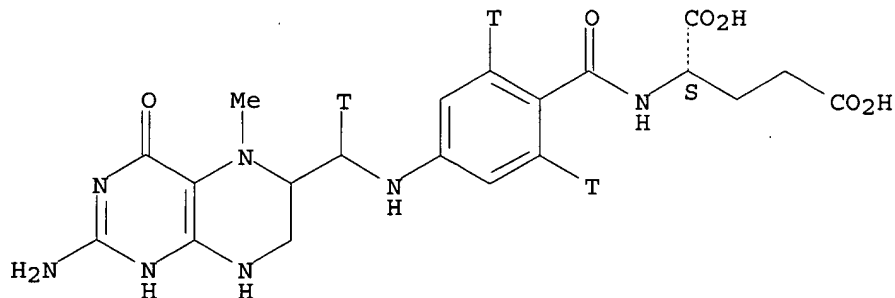


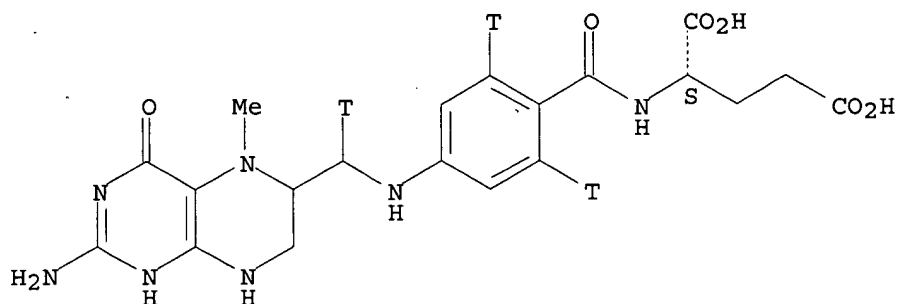
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

17 REFERENCES IN FILE CA (1967 TO DATE)  
 17 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 12 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 34418-06-9 REGISTRY  
 CN Glutamic acid, N-[p-[[[2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridiny]methyl-t]amino]benzoyl-2,6-t2]-, L- (8CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN **5-Methyltetrahydrofolic acid-9,3',5'-3H**  
 FS STEREOSEARCH  
 MF C20 H22 N7 O6 T3  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

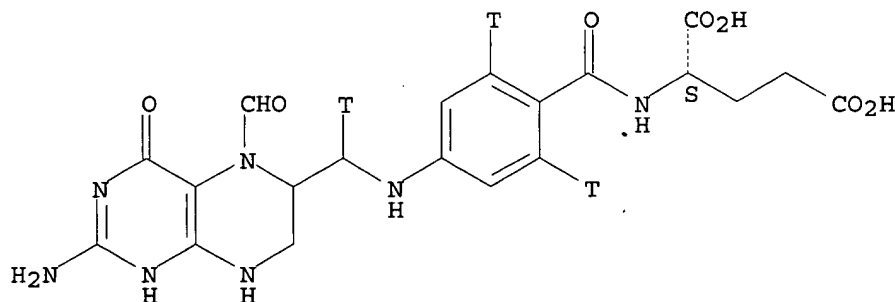




1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 13 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 34096-52-1 REGISTRY  
CN Glutamic acid, N-[p-[[2-amino-5-formyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl-t]amino]benzoyl-2,6-t2]-, L- (8CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **5-Formyltetrahydrofolic acid-9,3',5'-3H**  
FS STEREOSEARCH  
MF C20 H20 N7 O7 T3  
LC STN Files: CA, CAPLUS

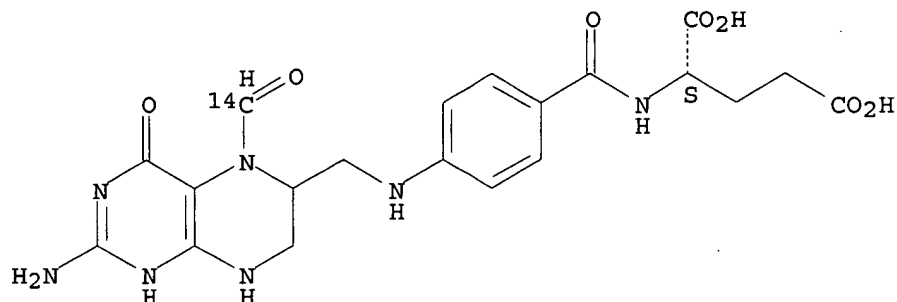
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 14 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 34096-51-0 REGISTRY  
CN L-Glutamic acid, N-[4-[[2-amino-5-(formyl-14C)-1,5,6,7-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid,  
N-[p-[[2-amino-5-formyl-14C-1,5,6,7-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]-, L- (8CI)  
OTHER NAMES:  
CN **5-Formyl-14C-tetrahydrofolic acid**  
FS STEREOSEARCH  
MF C20 H23 N7 O7  
LC STN Files: CA, CAPLUS

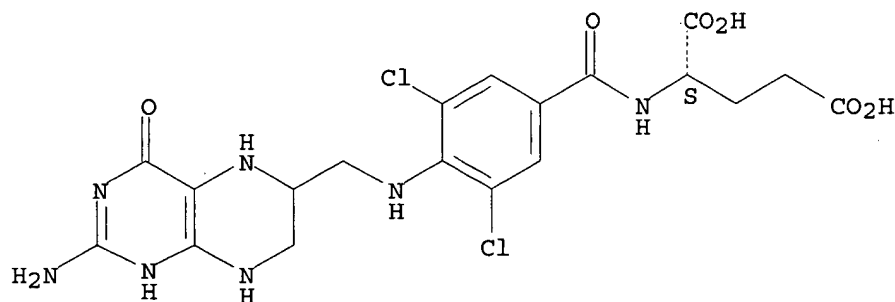
Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 15 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 32447-51-1 REGISTRY  
CN Glutamic acid, N-[4-[[2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinylnmethyl]amino]-3,5-dichlorobenzoyl]-, L- (8CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **3',5'-Dichlorotetrahydrofolic acid**  
FS STEREOSEARCH  
MF C19 H21 Cl2 N7 O6  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



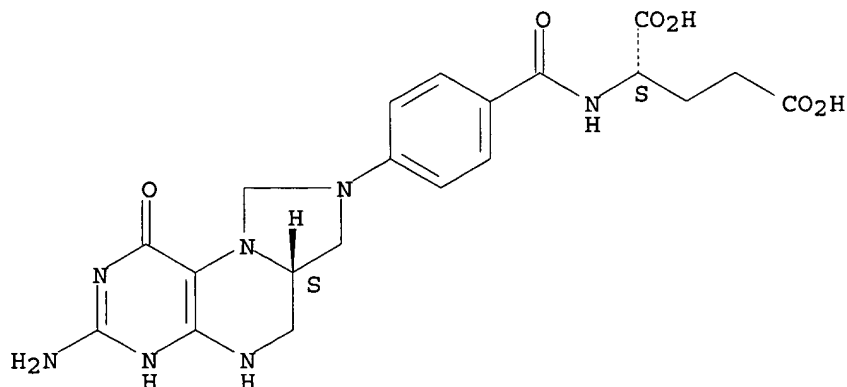
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 16 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 31690-12-7 REGISTRY  
CN L-Glutamic acid, N-[4-(3-amino-1,2,5,6,6a,7-hexahydro-1-oxoimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]-, (S)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-(3-amino-5,6,6a,7-tetrahydro-1-hydroxyimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]-, L-(-)- (8CI)  
CN Imidazo[1,5-f]pteridine, L-glutamic acid deriv.  
OTHER NAMES:  
CN **L-(-)-Methylenetetrahydrofolic acid**  
CN **1-N5,N10-Methylene-L-tetrahydrofolic acid**  
FS STEREOSEARCH  
DR 51372-95-3, 52746-46-0

MF C20 H23 N7 O6  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

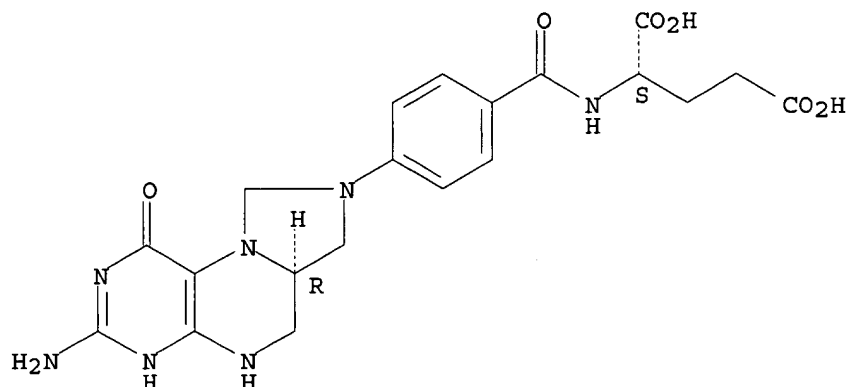


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 17 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 31690-11-6 REGISTRY  
CN L-Glutamic acid, N-[4-[(6aR)-3-amino-1,2,5,6,6a,7-hexahydro-1-oxoimidazo[1,5-f]pteridin-8(9H)-yl]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-(3-amino-5,6,6a,7-tetrahydro-1-hydroxyimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]-, L-(+)- (8CI)  
CN L-Glutamic acid, N-[4-(3-amino-1,2,5,6,6a,7-hexahydro-1-oxoimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]-, (R)-  
OTHER NAMES:  
CN (6R)-5,10-Methylene-5,6,7,8-tetrahydrofolic acid  
CN (6R)-5,10-Methylenetetrahydrofolate  
CN d-N5,N10-Methylene-L-tetrahydrofolic acid  
CN L-(+)-Methylenetetrahydrofolic acid  
FS STEREOSEARCH  
DR 1596-87-8, 14357-00-7, 20302-77-6, 51353-86-7, 52746-47-1  
MF C20 H23 N7 O6  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

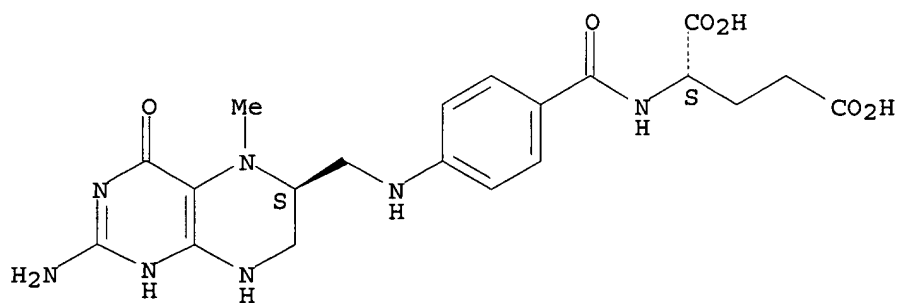


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

48 REFERENCES IN FILE CA (1967 TO DATE)  
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 48 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 18 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 31690-09-2 REGISTRY  
 CN L-Glutamic acid,  
 N-[4-[[[(6S)-2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridinyl)methyl]amino]benzoyl]-, L-(-)- (8CI)  
 CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, (S)-  
 OTHER NAMES:  
 CN (6S)-5-Methyltetrahydrofolic acid  
 CN 1-N5-Methyl-L-tetrahydrofolic acid  
 FS STEREOSEARCH  
 DR 150950-03-1  
 MF C20 H25 N7 O6  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, IPA, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

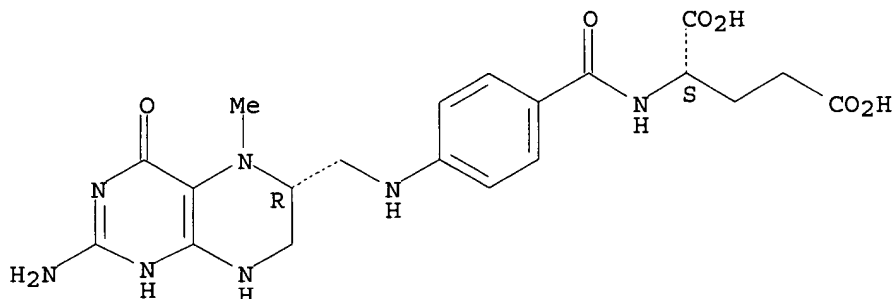


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

45 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
45 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 19 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 31690-08-1 REGISTRY  
CN L-Glutamic acid,  
N-[4-[[[(6R)-2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridinyl)methyl]amino]benzoyl]-, L-(+)- (8CI)  
CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, (R)-  
OTHER NAMES:  
CN **d-N5-Methyl-L-tetrahydrofolic acid**  
FS STEREOSEARCH  
MF C20 H25 N7 O6  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

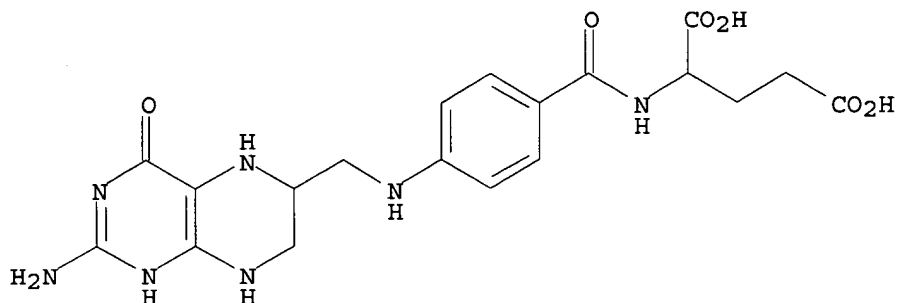


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

25 REFERENCES IN FILE CA (1967 TO DATE)  
25 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 20 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 29347-89-5 REGISTRY  
CN Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN DL-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-  
CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]-, DL- (8CI)  
OTHER NAMES:  
CN **DL-5,6,7,8-Tetrahydrofolic acid**  
MF C19 H23 N7 O6  
LC STN Files: BEILSTEIN\*, CA, CANCERLIT, CAPLUS, MEDLINE, TOXCENTER, TOXLIT, USPATFULL

(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1967 TO DATE)

6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 21 OF 38 REGISTRY COPYRIGHT 2001 ACS

RN 25630-71-1 REGISTRY

CN L-Glutamic acid, N-[4-[[[2-amino-1,4,5,6,7,8-hexahydro-5-(methyl-14C)-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glutamic acid,

N-[p-[[[2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-14C-6-pteridinyl)methyl]amino]benzoyl]-, L- (8CI)

OTHER NAMES:

CN **5-Methyl-14C-tetrahydrofolic acid**

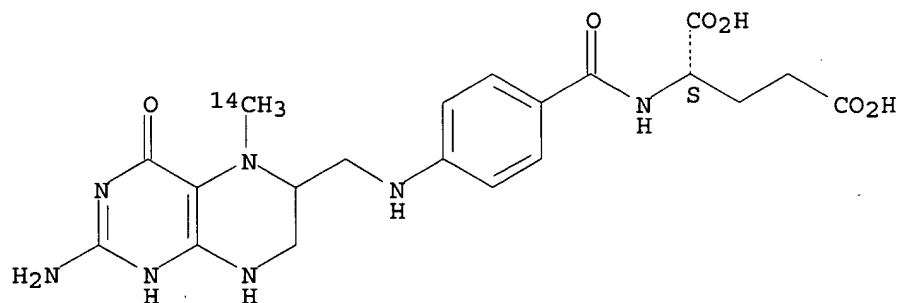
FS STEREOSEARCH

MF C20 H25 N7 O6

LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXLIT

(\*File contains numerically searchable property data)

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 22 OF 38 REGISTRY COPYRIGHT 2001 ACS

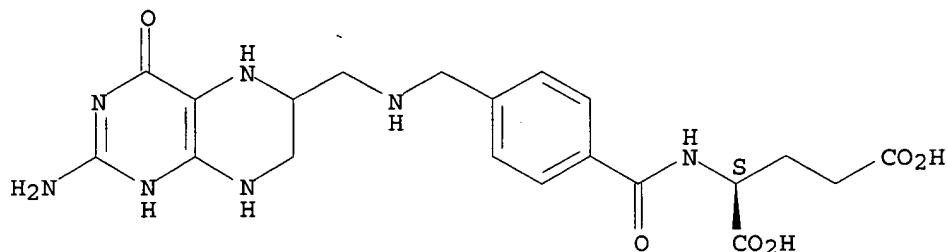
RN 24960-29-0 REGISTRY

CN Glutamic acid, N-[.alpha.-[[[2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]-p-toluoyl]-, L- (8CI) (CA INDEX NAME)

OTHER NAMES:

CN Isohomotetrahydrofolic acid  
 FS STEREOSEARCH  
 MF C20 H25 N7 O6  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

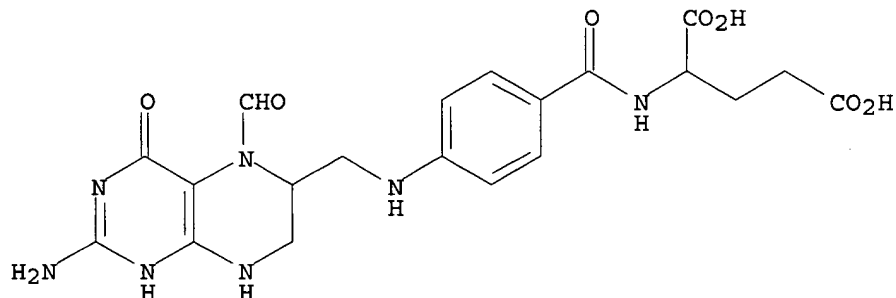


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 23 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 22350-60-3 REGISTRY  
 CN Glutamic acid, N-[4-[[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN DL-Glutamic acid, N-[4-[[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-  
 CN Glutamic acid, N-[p-[[[(2-amino-5-formyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]-, DL- (8CI)  
 OTHER NAMES:  
 CN dl-Folinic acid  
 CN **DL-N5-Formyltetrahydrofolic acid**  
 FS STEREOSEARCH  
 MF C20 H23 N7 O7  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, IPA, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Currently available stereo shown.



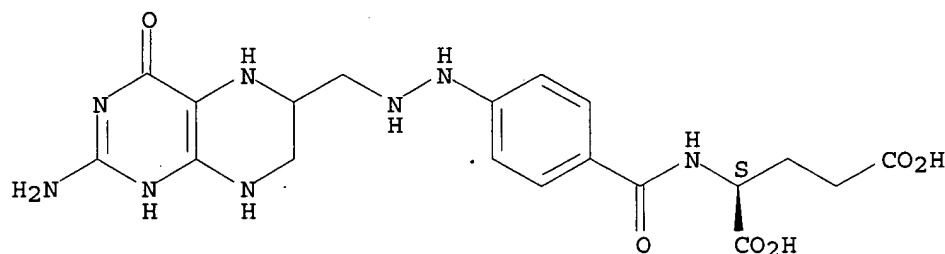
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

27 REFERENCES IN FILE CA (1967 TO DATE)

27 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 24 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 20751-48-8 REGISTRY  
 CN L-Glutamic acid, N-[4-[2-[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]hydrazino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-[2-[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]hydrazino]benzoyl]-, L- (8CI)  
 OTHER NAMES:  
 CN **Azahomotetrahydrofolic acid**  
 FS STEREOSEARCH  
 DR 22465-49-2  
 MF C19 H24 N8 O6  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

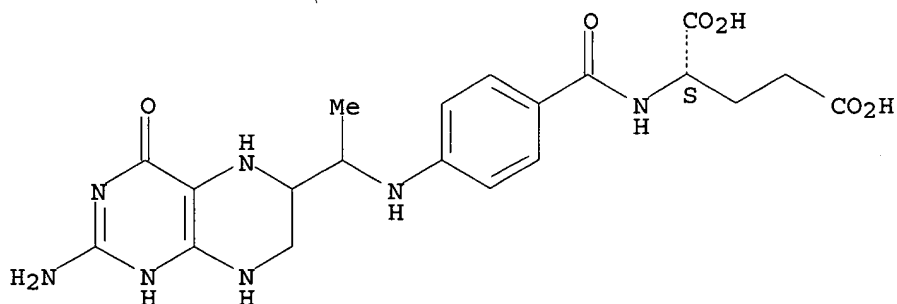


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 25 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 17863-76-2 REGISTRY  
 CN L-Glutamic acid, N-[4-[[1-(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)ethyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-[[1-(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)ethyl]amino]benzoyl]-, L- (8CI)  
 OTHER NAMES:  
 CN **C9-Methyltetrahydrofolic acid**  
 FS STEREOSEARCH  
 MF C20 H25 N7 O6  
 LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT

Absolute stereochemistry.



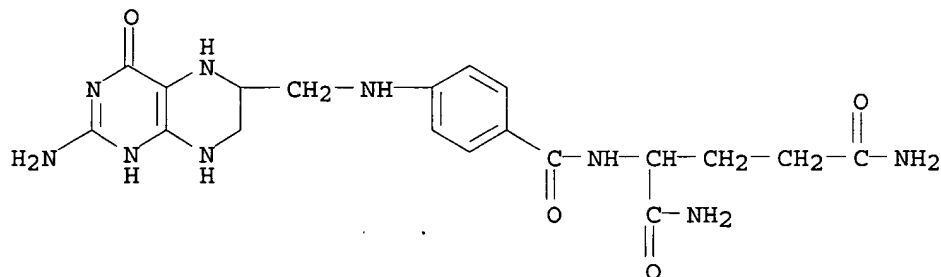
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1967 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 26 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 17435-37-9 REGISTRY  
CN Glutaramide, 2-[p-[[2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzamido]- (8CI) (CA INDEX NAME)

OTHER NAMES:

CN **Tetrahydrofolic acid diamide**  
FS 3D CONCORD  
MF C19 H25 N9 O4  
LC STN Files: CA, CAPLUS, TOXLIT



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

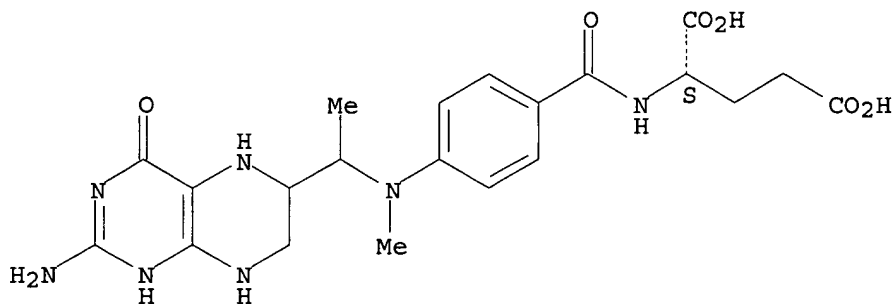
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 27 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 17435-34-6 REGISTRY  
CN Glutamic acid, N-[p-[[1-(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)ethyl]methylamino]benzoyl]-, L- (8CI) (CA INDEX NAME)

OTHER NAMES:

CN **C9,N10-Dimethyltetrahydrofolic acid**  
FS STEREOSEARCH  
DR 27452-64-8  
MF C21 H27 N7 O6  
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.

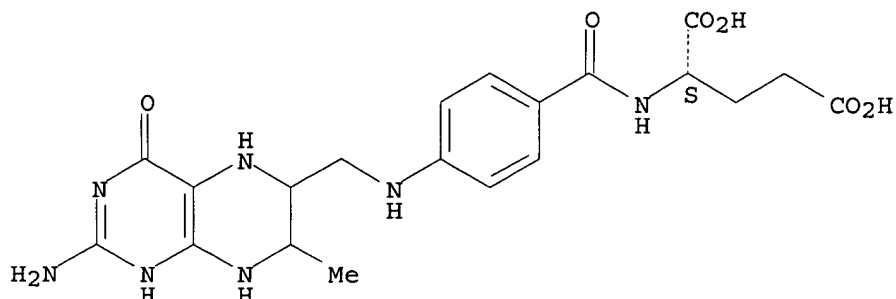


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 28 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 17087-21-7 REGISTRY  
CN Glutamic acid, N-[p-[[[2-amino-5,6,7,8-tetrahydro-4-hydroxy-7-methyl-6-pteridinyloxy]methyl]amino]benzoyl]-, L- (8CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **C7-Methyltetrahydrofolic acid**  
FS STEREOSEARCH  
MF C20 H25 N7 O6  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, TOXLIT  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



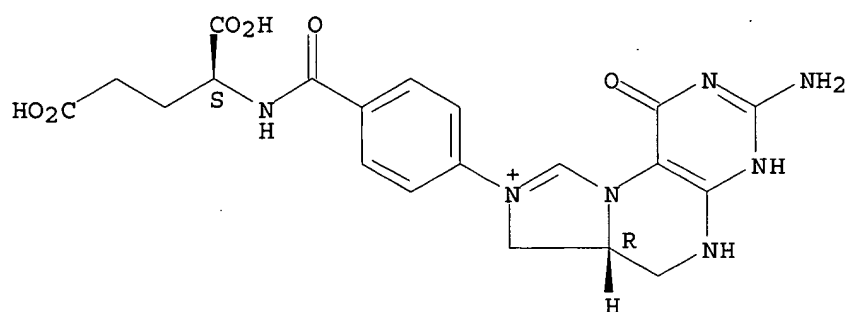
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 29 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 10360-12-0 REGISTRY  
CN Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[[(1S)-1,3-dicarboxypropyl]amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-, (6aR)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[[(1,3-dicarboxypropyl]amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-

CN Imidazo[1,5-f]pteridinium, 3-amino-8-[p-[(1,3-dicarboxypropyl)carbamoyl]phenyl]-5,6,6a,7-tetrahydro-1-hydroxy- (8CI)  
 OTHER NAMES:  
 CN **5,10-Methenyltetrahydrofolic acid**  
 CN Folic acid, tetrahydro-N<sup>9</sup>,N<sup>10</sup>-methylidene-  
 CN **N<sup>5</sup>,N<sup>10</sup>-Methenyltetrahydrofolic acid**  
 FS STEREOSEARCH  
 DR 16531-85-4, 102274-60-2, 65981-92-2, 73611-11-7, 88830-88-0, 40245-00-9, 49553-77-7  
 MF C20 H22 N7 O6  
 CI COM  
 LC STN Files: AGRICOLA, CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL

Absolute stereochemistry.



75 REFERENCES IN FILE CA (1967 TO DATE)  
 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 77 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 30 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 9028-69-7 REGISTRY  
 CN Reductase, methylenetetrahydrofolate (reduced riboflavin adenine dinucleotide) (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 5,10-Methylenetetrahydrofolate reductase  
 CN 5,10-Methylenetetrahydrofolate reductase (FADH<sub>2</sub>)  
 CN 5,10-Methylenetetrahydropteroylglutamate reductase  
 CN E.C. 1.1.1.68  
 CN E.C. 1.1.99.15  
 CN E.C. 1.7.99.5  
 CN Methylenetetrahydrofolate reductase  
 CN **Methylenetetrahydrofolic acid reductase**  
 CN N<sup>5</sup>,10-Methylenetetrahydrofolate reductase  
 CN N<sup>5</sup>,N<sup>10</sup>-Methylenetetrahydrofolate reductase  
 MF Unspecified  
 CI MAN  
 LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CIN,  
 EMBASE, PROMT, TOXCENTER, TOXLIT, USPATFULL

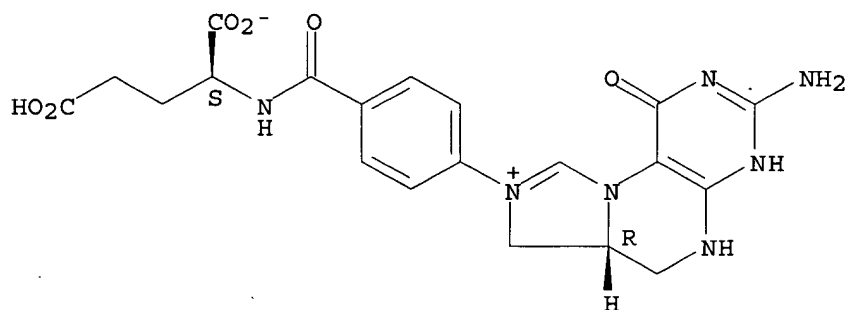
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

210 REFERENCES IN FILE CA (1967 TO DATE)  
 210 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 31 OF 38 REGISTRY COPYRIGHT 2001 ACS

RN 7444-29-3 REGISTRY  
 CN Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[[(1S)-1,3-dicarboxypropyl]amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-, inner salt, (6aR)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1H-Imidazo[1,5-f]pteridin-10-ium, 3-amino-8-[p-[(1,3-dicarboxypropyl)carbamoyl]phenyl]-2,5,6,6a,7,8-hexahydro-1-oxo-, hydroxide, inner salt (8CI)  
 CN 3-Amino-8-[p-[(1,3-dicarboxypropyl)carbamoyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-8H-imidazo[1,5-f]pteridin-10-ium hydroxide, inner salt (7CI)  
 CN 3-Amino-8-[p-[(L-1,3-dicarboxypropyl)carbamoyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-8H-imidazo[1,5-f]pteridin-10-ium hydroxide, inner salt (6CI)  
 CN Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[[(1,3-dicarboxypropyl)amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-, inner salt, [R-(R\*,S\*)]-  
 OTHER NAMES:  
 CN Anhydroleucovorin  
 CN Anhydroleucovorin A  
 CN Leucovorin A, anhydro-  
 CN Leucovorin, anhydro-  
 CN **Methenyltetrahydrofolic acid**  
 FS STEREOSEARCH  
 DR 6799-70-8, 1276-89-7, 25061-99-8, 74742-49-7, 26723-85-3, 28187-07-7, 100406-30-2  
 MF C20 H21 N7 O6  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, EMBASE, MEDLINE, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

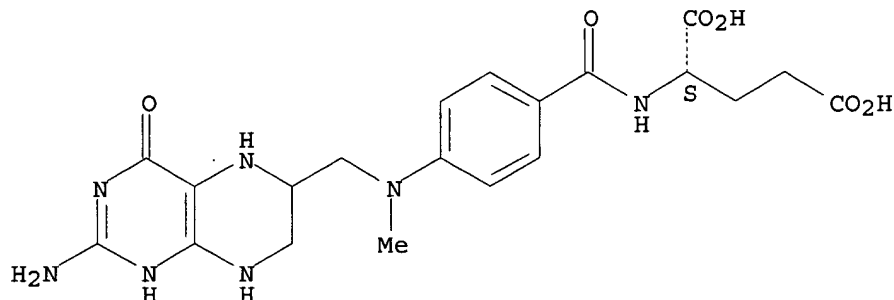


24 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 24 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 32 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 4349-39-7 REGISTRY  
 CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyloxy)methyl]methylamino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyloxy)methyl]methylamino]benzoyl]- (6CI, 7CI)  
 CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-

pteridiny]methyl]methylamino]benzoyl]-, L- (8CI)  
 OTHER NAMES:  
 CN 10-Methyltetrahydrofolic acid  
 CN N10-Methyltetrahydrofolic acid  
 FS STEREOSEARCH  
 DR 14231-39-1  
 MF C20 H25 N7 O6  
 CI COM  
 LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, TOXLIT

Absolute stereochemistry.

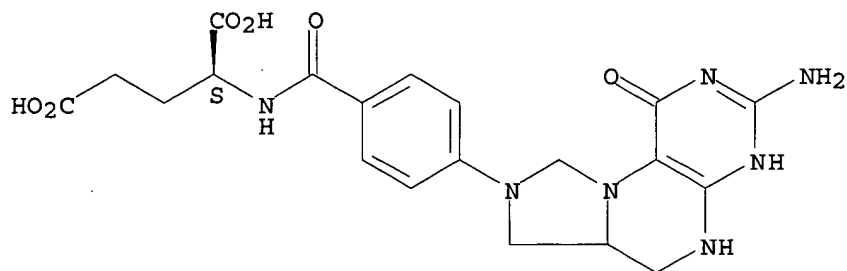


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 10 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 33 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 3432-99-3 REGISTRY  
 CN L-Glutamic acid, N-[4-(3-amino-1,2,5,6,6a,7-hexahydro-1-oxoimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-(3-amino-5,6,6a,7-tetrahydro-1-hydroxyimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]-, L- (8CI)  
 CN Imidazo[1,5-f]pteridine, L-glutamic acid deriv.  
 OTHER NAMES:  
 CN (+)-5,10-Methylene-5,6,7,8-tetrahydrofolic acid  
 CN 5,10-Methylene-5,6,7,8-tetrahydrofolic acid  
 CN 5,10-Methylenetetrahydrofolic acid  
 CN Folic acid, tetrahydro-N5,N10-methylene-  
 CN N5,N10-Methylene-5,6,7,8-tetrahydrofolic acid  
 CN N5,N10-Methylenetetrahydrofolic acid  
 CN N5,N10-Methylenetetrahydropteroylglutamic acid  
 FS STEREOSEARCH  
 DR 14948-92-6, 23284-08-4, 39939-22-5, 42578-82-5  
 MF C20 H23 N7 O6  
 CI COM  
 LC STN Files: AGRICOLA, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, MEDLINE, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

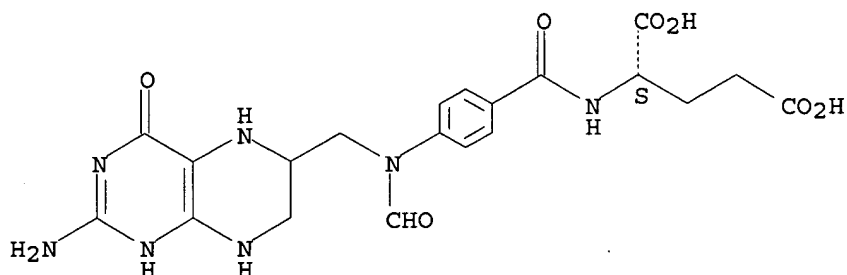


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431 REFERENCES IN FILE CA (1967 TO DATE)  
 51 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 433 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 34 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 2800-34-2 REGISTRY  
 CN L-Glutamic acid, N-[4-[[[2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]formylamino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, N-[p-[N-[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]formamido]benzoyl]- (7CI)  
 CN Glutamic acid, N-[p-[N-[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]formamido]benzoyl]-, L- (8CI)  
 OTHER NAMES:  
 CN **10-Formyl-5,6,7,8-tetrahydrofolic acid**  
 CN 10-Formyltetrahydrofolate  
 CN **10-Formyltetrahydrofolic acid**  
 CN 10-Formyltetrahydropteroylglutamic acid  
 CN **N10-Formyl-5,6,7,8-tetrahydrofolic acid**  
 CN N10-Formyltetrahydrofolate  
 CN **N10-Formyltetrahydrofolic acid**  
 CN N10-Formyltetrahydropteroylglutamate  
 FS STEREOSEARCH  
 DR 18656-95-6  
 MF C20 H23 N7 O7  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, DDFU, DRUGU, EMBASE, MEDLINE, NIOSHTIC, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

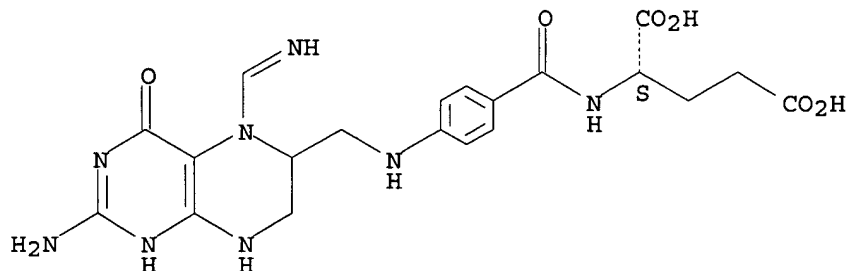


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

270 REFERENCES IN FILE CA (1967 TO DATE)  
 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 272 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 35 OF 38 REGISTRY COPYRIGHT 2001 ACS  
 RN 2311-81-1 REGISTRY  
 CN L-Glutamic acid, N-[4-[[[2-amino-1,4,5,6,7,8-hexahydro-5-(iminomethyl)-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid,  
 N-[p-[[[2-amino-5-formimidoyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]-, L- (8CI)  
 CN Glutamic acid,  
 N-[p-[[[2-amino-5-formimidoyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]- (6CI, 7CI)  
 CN L-Glutamic acid, N-[4-[[[2-amino-3,4,5,6,7,8-hexahydro-5-(iminomethyl)-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-  
 OTHER NAMES:  
 CN **5-Formiminotetrahydrofolic acid**  
 CN **Formiminotetrahydrofolic acid**  
 FS STEREOSEARCH  
 DR 7643-76-7, 42578-83-6  
 MF C20 H24 N8 O6  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

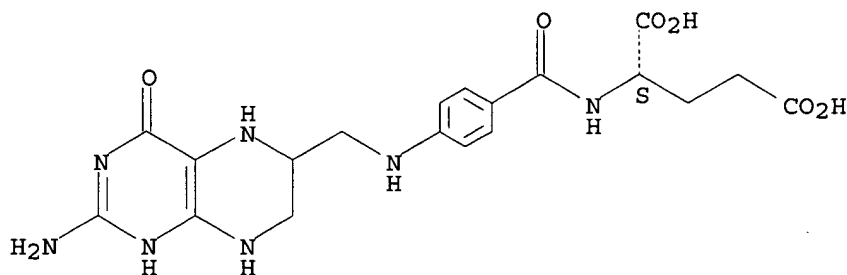


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 36 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 135-16-0 REGISTRY  
CN L-Glutamic acid, N-[4-[[ (2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glutamic acid, N-[p-[[ (2-amino-3,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, L- (7CI, 8CI)  
OTHER NAMES:  
CN (-)-L-5,6,7,8-Tetrahydrofolic acid  
CN 5,6,7,8-Tetrahydrofolic acid  
CN L-5,6,7,8-Tetrahydrofolic acid  
CN Tetrahydrofolic acid  
CN Tetrahydropteroylglutamic acid  
CN THFA  
FS STEREOSEARCH  
DR 60201-89-0, 18632-03-6, 14231-42-6, 15582-27-1, 4172-42-3  
MF C19 H23 N7 O6  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MSDS-OHS, PIRA, PROMT, RTECS\*, TOXCENTER, TOXLIT, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

826 REFERENCES IN FILE CA (1967 TO DATE)  
63 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
829 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 37 OF 38 REGISTRY COPYRIGHT 2001 ACS  
RN 134-35-0 REGISTRY

CN L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny]methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridiny]methyl]amino]benzoyl]-, L- (8CI)

CN Glutamic acid, N-[p-[[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridiny]methyl]amino]benzoyl]- (6CI)

OTHER NAMES:

CN **5-Methyl-5,6,7,8-tetrahydrofolic acid**

CN 5-Methyl-5,6,7,8-tetrahydropteroyl-L-glutamic acid

CN **5-Methyltetrahydrofolic acid**

CN 5-Methyltetrahydropteroyl monoglutamate

CN 5-Methyltetrahydropteroylglutamic acid

CN N-Methyltetrahydrofolate

CN **N-Methyltetrahydrofolic acid**

CN N5-Methyltetrahydrofolate

CN **N5-Methyltetrahydrofolic acid**

CN N5-Methyltetrahydropteroylglutamate

CN Prefolic A

FS STEREOSEARCH

DR 3922-58-5, 76937-22-9

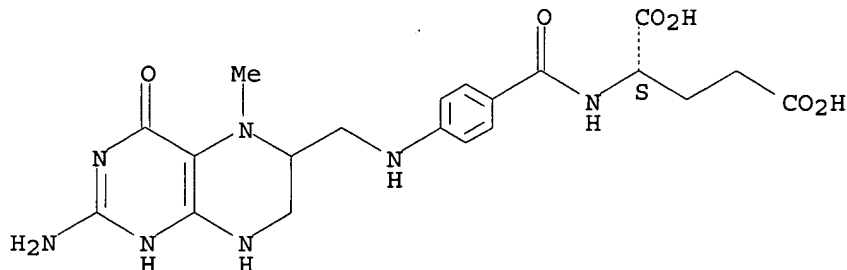
MF C20 H25 N7 O6

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CIN, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NIOSHTIC, PROMT, TOXCENTER, TOXLIT, USPATFULL, VETU

(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

995 REFERENCES IN FILE CA (1967 TO DATE)  
 21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 999 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 16 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 38 OF 38 REGISTRY COPYRIGHT 2001 ACS

RN 58-05-9 REGISTRY

CN L-Glutamic acid, N-[4-[[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridiny]methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

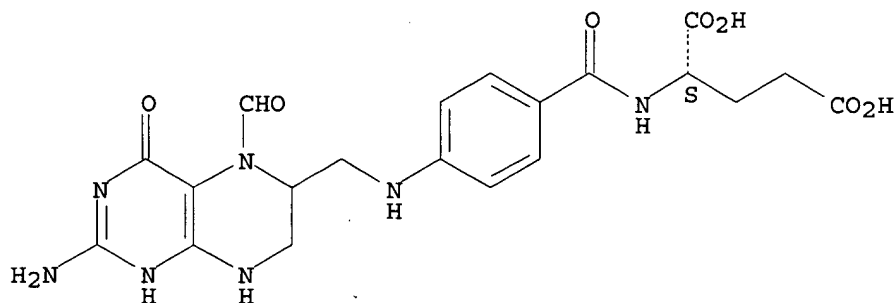
CN Glutamic acid, N-[p-[[[(2-amino-5-formyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridiny]methyl]amino]benzoyl]-, L- (8CI)

OTHER NAMES:

CN 10-Formyl-7,8-dihydrofolic acid

CN 5-Formyl-5,6,7,8-tetrahydrofolic acid  
 CN 5-Formyltetrahydrofolic acid  
 CN 5-Formyltetrahydropteroylglutamic acid  
 CN Folinic acid  
 CN Folinic acid-SF  
 CN 1-Leucovorin  
 CN Leucal  
 CN Leucovorin  
 CN Levoleucovorin  
 CN N5-Formyl-5,6,7,8-tetrahydrofolic acid  
 CN N5-Formyltetrahydrofolic acid  
 CN Welcovorin  
 FS STEREOSEARCH  
 DR 641-41-8, 121521-95-7, 17435-36-8, 3102-53-2, 33299-78-4, 34786-59-9,  
 40244-99-3  
 MF C20 H23 N7 O7  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS,  
 BIOSIS,  
 BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,  
 CHEMCATS,  
 CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HODOC\*, HSDB\*,  
 IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH,  
 PROMT,  
 TOXCENTER, TOXLIT, USAN, USPATFULL, VETU  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1629 REFERENCES IN FILE CA (1967 TO DATE)  
 36 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1634 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

ACCESSION NUMBER: 2001:885728 CAPLUS  
 DOCUMENT NUMBER: 136:11204  
 TITLE: Composition for the treatment and/or the prevention of osteoporosis and/or inflammatory joint diseases  
 INVENTOR(S): Buchholz, Herwig; Meduski, Jerzy; Frohne, Marcus  
 PATENT ASSIGNEE(S): Merck Patent Gmbh, Germany  
 SOURCE: PCT Int. Appl., 23 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091734	A2	200111206	WO 2001-EP5753	20010519

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-208572P P 20000602

AB Compsns. and pharmaceutical compsns. are described which comprise: a component A comprising one or more flavonol glycosides, a component B comprising one or more tetrahydrofolic acid compds., a component C comprising one or more calcium supplements, and a component D comprising one or more magnesium supplements. Methods of using such compsns. and pharmaceutical compsns. to treat and/or prevent osteoporosis and/or an inflammatory joint disease are also described. An oral formulation contained **isoquercetin** 500 mg, Ca 5-methyltetrahydrofolic acid 800 .mu.g, Ca citrate tetrahydrate 4000 mg, and Mg chloride hexahydrate 3000 mg.

IT **58-05-9**, 5-Formyltetrahydrofolic acid **134-35-0**, 5-Methyltetrahydrofolic acid **2800-34-2**, 10-Formyltetrahydrofolic acid **3432-99-3**, 5,10-Methylenetetrahydrofolic acid **10360-12-0**, 5,10-Methenyltetrahydrofolic acid **139418-88-5**, L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny]methyl)amino]benzoyl]-, calcium salt  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compn. for the treatment and/or the prevention of osteoporosis and/or inflammatory joint diseases)

L19 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:314527 CAPLUS  
 DOCUMENT NUMBER: 132:326078  
 TITLE: Compositions for the treatment and prevention of cardiovascular diseases  
 INVENTOR(S): Buchholz, Herwig; Meduski, Jerzy D.  
 PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025764	A2	20000511	WO 1999-EP7689	19991013
WO 2000025764	A3	20000713		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9964709 A1 20000522 AU 1999-64709 19991013

BR 9914815 A 20010703 BR 1999-14815 19991013

EP 1124548 A2 20010822 EP 1999-952559 19991013

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-106205P P 19981030

WO 1999-EP7689 W 19991013

AB Compns. comprising one or more active ingredients and, optionally, one or more nutritional substances, solid, liq. and/or semiliquid excipients or auxiliaries, wherein the active ingredients consist of a) a consisting of one or more compds. selected from Me and methylene donors, b) a consisting of one or more Me transporters, and c) a consisting of one or more **bioflavonoids** are well-suited for the treatment and prevention of transmethylation disorders, preferably cardiovascular diseases such as atherogenic and thrombogenic diseases. A compn. was prepd. contg. betaine 600, Ca L-5-methyltetrahydrofolate 0.5, and **isoquercetin** 500 mg.

IT 58-05-9 117-39-5, **Quercetin** 134-35-0

, 5-Methyltetrahydrofolic acid 2800-34-2, 10-

Formyltetrahydrofolate 3432-99-3 10360-12-0

139418-88-5, L-Glutamic acid, N-[4-[[[(2-amino-1,4,5,6,7,8-

hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, calcium salt

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. for treatment and prevention of cardiovascular diseases)

L19 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:491327 CAPLUS

DOCUMENT NUMBER: 122:281655

TITLE: Preclinical efficacy evaluation of potential chemopreventive agents in animal carcinogenesis models: methods and results from the NCI Chemoprevention Drug Development Program

AUTHOR(S): Steele, Vernon E.; Moon, Richard C.; Lubet, Ronald A.; Grubbs, Clinton J.; Reddy, Bandaru S.; Wargovich, Michael; McCormick, David L.; Pereira, Michael A.; Crowell, James A.; et al.

CORPORATE SOURCE: DCPC, National Institutes of Health, Bethesda, MD, 20892, USA

SOURCE: J. Cell. Biochem. (1994), (Suppl. 20), 32-54  
CODEN: JCEBD5; ISSN: 0730-2312

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the NCI, Chemoprevention Branch drug development program, potential chemopreventive agents are evaluated for efficacy against chem. carcinogen-induced tumors in animal models. This paper summarizes the results of 144 agents in 352 tests using various animal efficacy models. Of these results, 146 were pos., representing 85 different agents. The target organs selected for the animals model are representative of high-incidence human cancers. The assays include inhibition of tumors induced by MNU in hamster trachea, DEN in hamster lung, AOM in rat colon (including inhibition of AOM-induced aberrant crypts), MAM in mouse colon, DMBA and MNU in rat mammary glands, DMBA promoted by TPA in mouse skin, and OH-BBN in mouse bladder. The agents tested may be classified into various pharmacol. and chem. structural categories that are relevant to their chemopreventive potential. These categories include antiestrogens, antiinflammatories (e.g., NSAIDs), antioxidants, arachidonic acid metab.

inhibitors, GST and GSH enhancers, ODC inhibitors, protein kinase C inhibitors, retinoids and carotenoids, organosulfur compds., calcium compds., vitamin D3 and analogs, and phenolic compds. (e.g., flavonoids). The various categories of compds. have different spectra of efficacy in animal models. In hamster lung, GSH-enhancing agents and antioxidants appear to have high potential for inhibiting carcinogenesis. In the colon, NSAIDs and other antiinflammatory agents appear particularly promising. Likewise, NSAIDs are very active in mouse bladder. In rat mammary glands, retinoids and antiestrogens (as would be expected) are efficacious. Several of the chems. evaluated also appear to be promising chemopreventive agents based on their activity in several of the animal models. Particularly, the ODC inhibitor DFMO was active in the colon, mammary glands, the bladder models, while the dithiolthione, oltipraz, was efficacious in all the models listed above (i.e., lung, colon, mammary glands, skin, and bladder).

IT 58-05-9, Folinic acid 117-39-5, Quercetin

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preclin. efficacy evaluation of potential cancer chemopreventive agents in animal carcinogenesis models)

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L20 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:323144 CAPLUS

DOCUMENT NUMBER: 129:12752

TITLE: Treating Alzheimer's disease with folate, vitamin B12, organic nitrates, and ACE inhibitors or angiotensin II antagonists

INVENTOR(S): Smith, Anthony David; Jobst, Kim Anthony

PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9819690	A1	19980514	WO 1997-US20021	19971104
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
US 6008221	A	19991228	US 1997-959035	19971028
AU 9852442	A1	19980529	AU 1998-52442	19971104
AU 719290	B2	20000504		
EP 951293	A1	19991027	EP 1997-947335	19971104
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2001504104	T2	20010327	JP 1998-521674	19971104
US 6127370	A	20001003	US 1999-435804	19991108
PRIORITY APPLN. INFO.:			US 1996-30642P P	19961106
			US 1997-959035 A3	19971028
			WO 1997-US20021 W	19971104
AB	A method is provided for treating occlusive vascular disease or Alzheimer's disease, wherein the patient has at least moderately elevated blood levels of homocysteine and at least moderately reduced blood levels of folate and vitamin B12, wherein the patient is treated with folic acid, a folate or a deriv. thereof, and optionally vitamin B12, and optionally an org. nitrate such as isosorbide mononitrate or dinitrate, or an ACE inhibitor or an angiotensin II antagonist, or a NEP/ACE inhibitor or a combination of two or more of the above.			
IT	58-05-9, Leucovorin 107-43-7, Betaine 134-35-0 2800-34-2, 10-Formyltetrahydrofolate 3432-99-3 10360-12-0			
	RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (treating Alzheimer's disease with folate, vitamin B12, org. nitrates, and ACE inhibitors or angiotensin II antagonists)			

L20 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:761704 CAPLUS

DOCUMENT NUMBER: 128:45595

TITLE: Method for serum-free culture of human vascula